

**HIGH-EFFICIENCY TURBULATORS FOR HIGH-STAGE GENERATOR OF  
ABSORPTION CHILLER/HEATER**

**ABSTRACT OF THE DISCLOSURE**

Turbulators are disclosed for use in a high-stage generator for an exhaust-fired absorption chiller/heater. The turbulators are designed to minimize pressure drop across the turbulator, and thus minimize the efficiency loss to the exhaust source. One turbulator design has a number of flanges extending at a non-normal angle to a central web. Further, some of the flanges have cutout portions. The overall turbulator design is intended to minimize wake downstream of the turbulator blades, which could otherwise cause undesirable pressure drop. A second turbulator design incorporates flanges that extend at a normal angle relative to the central web, but wherein the flanges have a non-rectangular cross-sectional shape. Again, the goal of the turbulator designs here is to minimize wake, and potential pressure drop.